

Reserved File Name Extensions

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Outline

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- Joint Technical Architecture (JTA)
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Task

- Investigate and make recommendations concerning the implementation of Reserved File Name Extensions and how they are to be accommodated into the NT Registry database.
- Determine if the Logo Program's process for controlling reserved file extensions needs to be changed to accommodate independent segment development.

Integration & Runtime Specification (I&RTS)

- Paragraph 6.1 Miscellaneous
 - segments shall use file extensions that correspond to conventional Windows usage
- Paragraph 5.5.2.2.1
 - Unless a COTS segment, the segment can not create any root keys.
- The Registry segment descriptor allows segments to add entries to the NT registry.
 - \$HKEY_LOCAL_MACHINE\SOFTWARE\COE:MyEntries

Integration & Runtime Specification (I&RTS)

- Paragraph 6.5.7, provides the option to register icons for document types and provide a viewer to allow the shell to display the files

User Interface Specification for the DII

- To ensure portability across platforms the appropriate file extension for the content type e.g., .gif for GIF graphic files, must be used.

Joint Technical Architecture (JTA)

- Support document and data interchange
 - Identifies file formats for the interchange of common documents.
 - File formats are controlled and managed by the use of standardized file name extensions.
- The JTA lists the standard formats required of all applications acquired or developed, within the DoD, for the production of documents along with their recommended file name extension

Joint Technical Architecture (JTA) (Con't)

- File extensions listed in JTA

Document Type Reference	Standard/Vendor Format	Extension
Plain Text	ASCII Text	.txt
Compound	Acrobat 2.0	.pdf
Document*	HTML 2.0	.htm
MS Word 6.0		.doc
Rich Text Format		.rtf
WordPerfect 5.2		.wp5
Briefing -	Freelance Graphics 2.1	.pre
Graphic Presentation	MS Powerpoint 4.0	.ppt
Spreadsheet	Lotus 1-2-3 Release 3.x	.wk3
MS Excel 5.0		.xls
Database	Dbase 4.0	.dbf

Window NT and Windows 95 Logo Program

- Check the registry for the same file extension and ask the user if they want to change the default program for that particular file extension
- There is no file extension arbitration provided by the NT OS
- The Logo Program references developers to the “*The Windows Interface Guidelines for Software Design*” for registering file types and application data

Window NT and Windows 95 Logo Program (Con't)

- *The Windows Interface Guidelines for Software Design*
 - Common file extensions are listed in Chapter 10
 - Printed in 1995
 - Native data file types (if applicable) must be registered as follows:

[HKEY_CLASSES_ROOT]

.(file type extension)

Default = REG_SZ:FileTypeID

.ext = Applicationidentifier

Applicationidentifier = Type Name

Window NT and Windows 95 Logo Program (Con't)

Applicationidentifier = Type Name

The type name is used to identify the objects name, behavior, or capability. And can include the following elements:

- Company name - product identity
- Application name - Segment name
- Data Type - basic category of the object, e.g., drawing, graphic, or sound
- Version - identify multiple versions of the same data type

Window NT and Windows 95 Logo Program (Con't)

- Application Identifier controls
 - Start up the application by double clicking the file icon (I&RTS)
 - Use the right mouse pop-up menu to create a new file
 - Drag the icon to print
 - Have the document automatically listed under the Documents menu
 - Have commands on the icon to Send To, Cut, Copy, Open, Paste, Properties, Play, Edit, Print
 - Quick view the file (I&RTS)

Window NT and Windows 95 Logo Program (Con't)

- File extension and application identifier registry entries can be made by any COE user:
 - By selecting a file in Explorer and associating the file with a registered program on the system.
 - Creates root keys under HKEY_CLASSES_ROOT hive
 - .ext = ext_auto_file
 - ext_auto_file = \shell\open\command\ = application “%1”

Window NT 5.0 and Windows 98 Logo Program

- There are no new file extension guidelines or requirements in the draft Logo Program

Conclusions

- There is no Reserved File Name Extensions list
- The Windows NT OS does not control or arbitrate the use of file extensions
- The I&RTS specifies file extensions should follow standard Windows usage and the Logo Program controls standard Windows development
- The I&RTS excludes the creation of root registry keys

Conclusions (Con't)

- File extensions are required to control data files
- File extensions and their application identifiers must be a root key in the registry
- Segments without a Application identifier, will not allow users to:
 - Start up the application by double clicking the file icon
 - Use the right mouse pop-up menu to create a new file
 - Drag the icon to print
 - Have the document automatically listed under the Documents menu
 - Have commands on the icon to Send To, Cut, Copy, Open, Paste, Properties, Play, Edit, Print
 - Quick view the file

Recommendations

- Create a centralized list of known file extensions that is accessible to developers.
- Authorize DII COE segment developers to create file extensions.
- Require segment developers to register and control file extensions in accordance with the Microsoft Logo Program.
- Authorize DII COE developers to create registry root keys and subkeys outside of the
HKEY_LOCAL_MACHINE\SOFTWARE\COE\

Recommendations (con't)

- Require DII COE developers to create registry keys and subkeys in accordance with the Microsoft Logo Program